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1: P16150 . LEUKOSIALIN PRECUR...[gi:126213]

PubMed, Related Sequences

LOCUS LEUK_HUMAN 400 aa
DEFINITION LEUKOSIALIN PRECURSOR (LEUCOCYTE SIALOGLYCOPROTEIN) (SIALOPHORIN)
ACCESSION (CD43 ANTIGEN) (GALACTOGLYCOPROTEIN) (GALGP).
PID P16150
VERSION g126213
DBSOURCE P16150 GI:126213
KEYWORDS swissprot: locus LEUK_HUMAN, accession P16150;
SOURCE class: standard.
ORGANISM created: Apr 1, 1990.
sequence updated: Apr 1, 1990.
annotation updated: Jul 15, 1999.
xrefs: gi: 187118, gi: 307124, gi: 338230, gi: 338231, gi: 36455,
gi: 36456, gi: 180125, gi: 180126, gi: 107686, gi: 106898, gi:
106899, gi: 88098, gi: 107688
xrefs (non-sequence databases): MIM 182160
REFERENCE Glycoprotein; Transmembrane; Signal; T-cell; Antigen.
AUTHORS human.
TITLE Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Mammalia;
Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (residues 1 to 400)
REFERENCE Pallant,A., Eskenazi,A., Mattei,M.G., Fournier,R.E., Carlsson,S.R
AUTHORS Fukuda,M. and Frelinger,J.G.
TITLE Characterization of cDNAs encoding human leukosialin and
localization of the leukosialin gene to chromosome 16
JOURNAL Proc. Natl. Acad. Sci. U.S.A. 86 (4), 1328-1332 (1989)
MEDLINE 89145235
REMARK SEQUENCE FROM N.A.
REFERENCE 2 (residues 1 to 400)
AUTHORS Shelley,C.S., Remold-O'Donnell,E., Davis,A.E. III., Bruns,G.A.,
Rosen,F.S., Carroll,M.C. and Whitehead,A.S.
TITLE Molecular characterization of sialophorin (CD43), the lymphocyte
surface sialoglycoprotein defective in Wiskott-Aldrich syndrome
JOURNAL Proc. Natl. Acad. Sci. U.S.A. 86 (8), 2819-2823 (1989)
MEDLINE 89202417
REMARK SEQUENCE FROM N.A.
REFERENCE Erratum: [[published erratum appears in Proc Natl Acad Sci U S A
1989 Jun;86(12):4689]]
AUTHORS 3 (residues 1 to 400)
TITLE Shelley,C.S., Remold-O'Donnell,E., Rosen,F.S. and Whitehead,A.S.
JOURNAL Structure of the human sialophorin (CD43) gene. Identification of
features atypical of genes encoding integral membrane proteins
MEDLINE Biochem. J. 270 (3), 569-576 (1990)
REMARK 91054342
REFERENCE SEQUENCE FROM N.A.
AUTHORS 4 (residues 1 to 400)
TITLE Kudo,S. and Fukuda,M.
JOURNAL A short, novel promoter sequence confers the expression of human
leukosialin, a major sialoglycoprotein on leukocytes
J. Biol. Chem. 266 (13), 8483-8489 (1991)

MEDLINE 91217090
REMARK SEQUENCE FROM N.A.
REFERENCE
AUTHORS SCHMID, K., HEDIGER, M.A., BROSSMER, R., COLLINS, J.H., HAUPT, H.,
 MARTI, T., OFFNER, G.D., SCHALLER, J., TAKAGAKI, K., WALSH, M.T.,
 SCHWICK, H.G., ROSE, F.S. and REMOLD-O'DONNELL, E.
TITLE Amino acid sequence of human plasma galactoglycoprotein: identity
 with the extracellular region of CD43 (sialophorin)
JOURNAL Proc. Natl. Acad. Sci. U.S.A. 89 (2), 663-667 (1992).
MEDLINE 92115721
REMARK
COMMENT PARTIAL SEQUENCE OF 20-245, AND CARBOHYDRATE-BINDING SITES.

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 [FUNCTION] ONE OF THE MAJOR GLYCOPROTEINS OF THYMOCYTES AND T LYMPHOCYTES. PLAYS A ROLE IN THE PHYSICOCHEMICAL PROPERTIES OF THE T-CELL SURFACE AND IN LECTIN BINDING. PRESENTS CARBOHYDRATE LIGAN TO SELECTINS. HAS AN EXTENDED RODLIKE STRUCTURE THAT COULD PROTRU ABOVE THE GLYCOCALYX OF THE CELL AND ALLOW MULTIPLE GLYCAN CHAINS TO BE ACCESSIBLE FOR BINDING.

[SUBCELLULAR LOCATION] TYPE I MEMBRANE PROTEIN.

[TISSUE SPECIFICITY] CELL SURFACE OF THYMOCYTES, T LYMPHOCYTES, NEUTROPHILS, PLASMA CELLS AND MYELOMAS.

[PTM] HAS A HIGH CONTENT OF SIALIC ACID AND O-LINKED CARBOHYDRATE STRUCTURES.

[DISEASE] CD43 EXPRESSION IS DEFECTIVE ON THE T-CELLS OF MALES WITH THE IMMUNODEFICIENCY WISKOTT-ALDRICH SYNDROME. AFFECTED MALES ARE SUSCEPTIBLE TO OPPORTUNISTIC INFECTIONS AND DO NOT RESPOND TO POLYSACCHARIDE ANTIGENS, REFLECTING DEFECTS IN CYTOTOXIC AND HELP T-CELL FUNCTIONS.

[DATABASE] NAME=PROW; NOTE=CD guide CD43 entry;
 WWW=<http://www.ncbi.nlm.nih.gov/prow/cd/cd43.htm>.

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/note="CYTOPLASMIC (POTENTIAL)."

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241 stvpfrnpde nsrgmlpvav lvallavivi vallllwrrr qkrrtgalvl srwgkrngvv
301 dawagpaqvp eegavtvvg gsggdkgsgf pdgegsrrp tlfffgrrk srqgslamee
361 lksgsgpslk geeeplvase dgavdapapd epeggdgaap

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Revised: January 10, 2000.